Cotton Insect Newsletter

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Newsletter Update

This is the second cotton insect newsletter of 2008. If you missed the first one, it is archived at http://www.clemson.edu/edisto/cotton/cotton.htm, along with newsletters from previous seasons. Please distribute copies of this newsletter to all interested parties, and please provide input for the newsletter. There are many more eyes out there than mine, so if you see something interesting in the field concerning insects or anything else, let me know about it. Send me your comments or pictures (pictures speak volumes, right?), and I will include them, providing you with credit for the observations.

Because of increased soybean acreage, I am going to include information on insects important in soybeans in this year's newsletter. Please include soybean insects in your comments to me each week.

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Status of Cotton Crop

As of 11 May 2008, the USDA NASS South Carolina Statistical Office had our progress at 29% of the crop being planted, not far behind the 5-yr average of 37%. These are observed/perceived state-wide averages.

Soybean Insects

Nothing to report yet. We will be evaluating the Cruiser seed treatment in soybeans this year and will be able to offer data on that with regard to insect control and what that might mean for yields.

Pesticide Label Updates

New registration for pyrethroid insecticide in soybeans – Hero. Hero is a combination of two pyrethroids (bifenthrin and *zeta*-cypermethrin) in a pre-mixed product. Check the label for use rates and insects controlled.

News from Above the Lakes

No news this week. Please send me your observations and comments!

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Pest Management Handbook

Copies of the "2008 Pest Management Handbook for Field Crops" (ACPTP 08-01) are now available for $12 per copy. Contact your local county office for information.

Thrips

As you all know, thrips feed on leaves and terminals of seedling plants, thereby stunting growth and delaying maturity. Damaged leaves appear crinkled on top, and lower surfaces will often have a silvery sheen. Leaf margins become cupped and terminal buds may be destroyed. Tobacco thrips, *Frankliniella fusca*, remains our predominant species in cotton in South Carolina. Seed treatments (Avicta Complete and Aeris with Trilex) and/or in-furrow use of Temik are options for preventative suppression of both thrips and nematodes. I have observed that each of these products has strengths and weaknesses. My experiences with these products have resulted in my opinion that the seed treatments can do a fine job on "heavier" ground with more clay than on "lighter" ground with more sand content. Much of this is likely due to a relatively good correlation between soil type as defined by electrical conductivity (EC) and numbers of nematodes. Generally, the lighter soils tend to harbor higher numbers of nematodes than the heavier soils. Seed treatments can be effective on heavier soils because numbers of nematodes are generally lower, and the enhanced fungicide package offers more protection in disease-prone areas (i.e. clay holds more water, promoting disease). Use of Temik on the sandier soils has historically been a sound management approach for both thrips and nematodes. Because most of our soils have high amounts of sand, Temik has performed well over the years and continues to be a top option. The combination of Temik and a seed treatment can provide extra insurance where desired, but it will be expensive insurance.

After the at-planting decisions are long-gone, we are faced with emergence of our crop into conditions that only mother-nature knows in advance. If conditions are favorable for growing, they are generally favorable for systemic uptake of insecticide, facilitating control of thrips. Likewise, good growing conditions result in healthy plants that can outgrow nematode injury with the nematicide doing its job. Guidelines for control of thrips after planting are below:

THRIPS (FOLIAR SPRAYS)

Product	Product/acre	Lb ai/acre	Acre/gal	REI	PHI	Comments
dicrotophos **(R)**		0.1-0.2		6 d	30 d	3.2 oz limit
Bidrin 8 E	1.6-3.2 oz		40-80			pre-square
acephate		0.15-0.18		24 hr	21 d	
Orthene 97	2.5-3.0 oz		-			
Orthene 90 S	2.67-3.2 oz		-			
Acephate 90 S	2.67-3.2 oz		-			
dimethoate		0.125-0.25		48 hr	14 d	
Dimethoate 4 EC	4-8 oz		16-32			
methamidophos **(R)**		0.1-0.2		48 hr	50 d	
Monitor 4 EC	3.2-6.4 oz		20-40			

Generally a soil insecticide used at planting will protect seedling plants from the severe stunting that is characteristic of thrips injury. Occasionally, however, conditions will be unfavorable for proper uptake of systemic insecticides (too cool, dry soil, excessive moisture, etc.) and plants can be severely damaged. **Foliar treatments will be most effective when applied to cotton seedlings prior to unfolding of the second true leaf**. At this growth stage a foliar insecticide treatment may be needed when two or more thrips are found per plant. Shake each plant (randomly select 25 or more) into a coffee cup or a similar utensil to facilitate counting. When most plants have severely damaged growing points and immature thrips are present, one or more foliar treatments may be needed to allow the plants to resume normal growth and development. Examine plants 5-7 days after the initial treatment, and treat again if immatures are still present on most plants. When the newly unfolded leaves of infested plants are free of damage, and plants appear to be growing at a normal rate, further applications of insecticides will have little benefit. Treatments applied beyond the four-leaf stage of growth may actually be counter productive, as these would likely reduce beneficial populations and result in early-season problems with other pests.

Need More Information?

Log on to the following webpage to view important cotton management recommendations, data, and historical cotton insect newsletters: http://www.clemson.edu/scg/ipm/cotton.html

Sincerely,

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Cotton Entomologist

Visit our website at:
http://www.clemson.edu